

ABSTRACT

The present invention solves a smear problem caused by mixing of a noise signal with signal electric charge being transferred in an operation to transfer the signal charge obtained as a result of a process carried out on a received light beam having a large wavelength. In order to solve the problem, the present invention provides a solid-state image pickup device including a layered structure which includes photosensors and an electric-charge transfer section. The photosensors include a first photosensor (21) and a second photosensor (22) for receiving a light beam with a wavelength smaller than the wavelength of a light beam received by the first photosensor (21). The first photosensor (21) and the second photosensor (2) are provided at adjacent locations separated away from each other by a potential barrier section (12). A read gate (42) provided beneath the first photosensor (21) transports electric charge obtained as a result of a process carried out by the first photosensor (21) to an electric-charge transfer section (50) provided beneath the second photosensor (22).